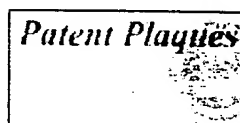




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JP5192535A: METHOD AND APPARATUS FOR PURIFYING EXHAUST GAS

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Abstract: **Purpose:** To efficiently adsorb and remove low concn. NOx with reduced energy consumption by a method wherein ozone is mixed with exhaust gas to oxidize NO to NO2 which is, in turn, adsorbed and removed in an adsorbing tank and high temp. air is circulated to the adsorbing tank after adsorption treatment to regenerate an adsorbent and separated conc. NOx is made harmless by a selective catalytic reducing method.

Constitution: When ozone is added to exhaust gas containing low concn. NOx such as tunnel ventilation exhaust gas from an ozone adding means 12, NO is oxidized to NO2 at room temp. Thereafter, the exhaust gas is passed through adsorbing tanks 14a, 14c packed with a manganese oxide-activated alumina type adsorbent to adsorb and remove NOx. A high temp. air circulating system 20 equipped with a circulating blower 16 and a heater 18 is connected to the respective adsorbing tanks 14 and high temp. air is passed through the adsorbing tank 14b after adsorption to regenerate an adsorbent. NOx separated from the adsorbent is decomposed into N2 and H2O by a selective catalytic reducing reactor 22 packed with a denitration catalyst to be made harmless.

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Foreign References:

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